

WHAT IS CLAIMED IS

- Sub A1 >
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1. A method for modulating endoreduplication comprising introducing into a target cell an isolated viral replicase polynucleotide operably linked to a promoter driving expression in the target cell or an isolated viral replicase polypeptide.
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2. The method of claim 1 wherein the polynucleotide is from a plant geminivirus.
- Sub A2 >
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3. The method of claim 2 wherein the polynucleotide is wheat dwarf virus Replicase.
- Sub A3 >
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4. The method of claim 1 wherein the target cell is a plant cell.
5. The method of claim 4 wherein the plant cell is from a monocot or a dicot plant.
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6. The method of claim 2 wherein the plant cell is from corn, soybean, sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley, potato, tomato, and millet.
- Sub A3 >
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7. A method for increasing crop yield through increased endoreduplication comprising introducing into a plant cell an isolated viral replicase polynucleotide operably linked to a promoter driving expression in the plant cell.
- Sub A4 >
8. The method of claim 7 wherein the polynucleotide is from a plant geminivirus.
- Sub A4 >
9. The method of claim 8 wherein the polynucleotide is wheat dwarf virus Replicase.
- Sub A4 >
10. The method of claim 7 wherein the plant cell is a monocot or a dicot.

The method of claim 10 wherein the plant cell is from corn, soybean, sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley, potato, tomato, and millet.

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12. The method of claim 7 wherein the promoter is inducible, or regulated in a tissue specific manner, or developmentally or temporally regulated.

Sub 05 >

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